

Title (en)
Connection and alingment systems and methods

Title (de)
Verbindungs- und Ausrichtungssystem und -verfahren

Title (fr)
Systèmes et procédés de liaison et d'alignement

Publication
EP 2526984 A1 20121128 (EN)

Application
EP 12178994 A 20101229

Priority
• EP 10803711 A 20101229
• US 65037809 A 20091230

Abstract (en)
The detection of correct alignment of the housing components is addressed in a medical device (1100) for treating a user. The medical device (1100) comprises a first housing portion (1101) adapted to be carried by a user and a second housing portion (1102) configured to be selectively operatively engaged with and disengaged from the first housing portion (1101). A magnetic source (1120) having at least one of a certain magnetic field and a certain magnetic strength provided on at least one of the first housing portion (1101) and the second housing portion (1102) and a sensor (1110) for detecting at least one of the certain magnetic field and the certain magnetic strength provided on the other of the first housing portion (1101) and the second housing portion (1102). In addition there is circuitry configured to provide a first signal in a case where the first housing portion (1101) and the second housing portion (1102) are brought together and the sensor (1110) detects at least one of the certain magnetic field and the certain magnetic strength of the magnetic source (1120), the circuitry further being configured to provide a second signal in a case where the first housing portion (1101) and the second housing portion (1102) are brought together and the sensor (1110) detects at least one of a magnetic field different from the certain magnetic field and a magnetic strength different from the certain magnetic strength of the magnetic source (1120).

IPC 8 full level
A61M 5/14 (2006.01); **A61M 5/142** (2006.01); **A61M 5/145** (2006.01); **A61M 5/158** (2006.01); **A61M 5/172** (2006.01); **A61M 39/10** (2006.01)

CPC (source: EP US)
A61M 5/1413 (2013.01 - EP US); **A61M 5/14248** (2013.01 - EP US); **A61M 5/172** (2013.01 - US); **A61M 5/1456** (2013.01 - EP US); **A61M 5/1723** (2013.01 - EP US); **A61M 2005/14208** (2013.01 - US); **A61M 2005/14252** (2013.01 - EP US); **A61M 2005/14268** (2013.01 - EP US); **A61M 2005/1585** (2013.01 - EP US); **A61M 2039/1072** (2013.01 - EP US); **A61M 2205/14** (2013.01 - EP US); **A61M 2205/6054** (2013.01 - EP US); **A61M 2207/00** (2013.01 - US); **A61M 2230/201** (2013.01 - EP US); **Y10T 29/49002** (2015.01 - EP US); **Y10T 29/49826** (2015.01 - EP US); **Y10T 29/49828** (2015.01 - EP US)

Citation (applicant)
• WO 0170307 A1 20010927 - MINIMED INC [US]
• WO 2004030716 A2 20040415 - INSULET CORP [US]
• WO 2004030717 A2 20040415 - INSULET CORP [US]
• US 2005065760 A1 20050324 - MURTFELDT ROBERT [US], et al
• US 6589229 B1 20030708 - CONNELLY ROBERT I [US], et al
• US 64543506 A 20061226
• US 2002022855 A1 20020221 - BOBROFF RANDA M [US], et al
• US 38913203 A 20030314
• US 31465302 A 20021209
• US 58883206 A 20061027
• US 58884706 A 20061027
• US 58932306 A 20061027
• US 60217306 A 20061120
• US 60211306 A 20061120
• US 64599306 A 20061226
• US 64597206 A 20061226
• US 64605206 A 20061226
• US 64600006 A 20061226
• US 60683706 A 20061130
• US 70271307 A 20070205
• US 84360107 A 20070822
• US 86889807 A 20071008
• US 96464907 A 20071226
• US 11175108 A 20080429
• US 11181508 A 20080429
• US 92440207 A 20071025
• US 92942807 A 20071030
• US 96557807 A 20071227
• US 10758008 A 20080422
• US 96466307 A 20071226
• US 18073202 A 20020626
• US 9973808 A 20080408
• US 2796308 A 20080207
• US 12164708 A 20080515
• US 4426908 P 20080411
• US 4429208 P 20080411
• US 4432208 P 20080411
• US 17950208 A 20080724
• US 33636708 A 20081216
• US 16621008 A 20080701
• US 27113408 A 20081114

- US 17197108 A 20080711
- US 18907708 A 20080808
- US 17953608 A 20080724
- US 27718608 A 20081124
- US 21178308 A 20080916
- US 24794508 A 20081008
- US 36007709 A 20090126
- US 34536208 A 20081229
- US 35318109 A 20090113
- US 36081309 A 20090127
- US 6088608 A 20000711 - SCHULMAN JOSEPH H [US], et al
- US 6119028 A 20000912 - SCHULMAN JOSEPH H [US], et al
- US 6740072 B2 20040525 - STARKWEATHER TIMOTHY J [US], et al
- US 6827702 B2 20041207 - LEBEL RONALD J [US], et al
- US 7323142 B2 20080129 - PENDO SHAUN [US], et al
- US 36034299 A 19990722
- US 31806001 P 20010907
- US 44547703 A 20030527
- US 42938503 A 20030505
- US 81366001 A 20010321
- US 32839303 A
- US 2006264894 A1 20061123 - MOBERG SHELDON B [US], et al
- US 21046705 A 20050823
- US 21115005 A 20050823
- US 21045505 A 20050823
- US 6485465 B2 20021126 - MOBERG SHELDON B [US], et al
- US 14911905 A 20050608
- US 2005101910 A1 20050512 - BOWMAN LEIF N [US], et al
- US 2006129090 A1 20060615 - MOBERG SHELDON B [US], et al
- US 5545152 A 19960813 - FUNDERBURK JEFFERY V [US], et al
- US 55300809 A 20090902
- US 2007142776 A9 20070621 - KOVELMAN PAUL H [US], et al
- US 64961909 A 20091230

Citation (search report)

- [X] WO 2008024814 A2 20080228 - MEDTRONIC MINIMED INC [US], et al
- [Y] GB 2327151 A 19990113 - WOODS RANDALL [US]
- [Y] WO 02068015 A2 20020906 - INSULET CORP [US]

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

US 2011160655 A1 20110630; US 8998840 B2 20150407; CA 2783479 A1 20110707; CA 2783479 C 20141014; CA 2858326 A1 20110707; CA 2858326 C 20160329; CA 2858333 A1 20110707; CA 2858333 C 20151117; CN 102770171 A 20121107; CN 102770171 B 20140723; CN 104138622 A 20141112; CN 104138622 B 20170412; CN 104138623 A 20141112; CN 104138623 B 20170315; DK 2519285 T3 20160905; EP 2519285 A2 20121107; EP 2519285 B1 20160525; EP 2526983 A1 20121128; EP 2526983 B1 20160309; EP 2526984 A1 20121128; EP 2526984 B1 20171018; JP 2013516239 A 20130513; US 2012172803 A1 20120705; US 2015335816 A1 20151126; US 9039659 B2 20150526; US 9545474 B2 20170117; WO 2011082256 A2 20110707; WO 2011082256 A3 20120119

DOCDB simple family (application)

US 65037809 A 20091230; CA 2783479 A 20101229; CA 2858326 A 20101229; CA 2858333 A 20101229; CN 201080064154 A 20101229; CN 201410273570 A 20101229; CN 201410273610 A 20101229; DK 10803711 T 20101229; EP 10803711 A 20101229; EP 12178991 A 20101229; EP 12178994 A 20101229; JP 2012547277 A 20101229; US 2010062414 W 20101229; US 201213421564 A 20120315; US 201514720663 A 20150522